

## Digital Network Public Address& Voice Alarm System

### Digital YA & PA Systems Integration

Voice evacuation and public address systems integration includes paging system and background music system.

### LAN Network System

Lowest cost & highest reliability by CAT 5 cable system.

### Design & Manufacture by Accordance with EN54-16 and BS5839 Standards

EN54-16 and EN54-24 certifications are under taken.

### Permanent Supervision from Microphone Capsule to Loudspeaker Lines

Monitor from mic capsule, control line, data line, controller, amplifier, fireman mic, source modular, amplifier changeover, AC & DC power supply, loudspeaker line to volume control.

### Digital Class-D 100V Amplifier

One, two & four channels digital class-D switching power technology amplifier power at 120W, 240W, 350W & 500W.

### Matrix Amplifier Failure Changeover Capacity of One Backup Amplifier Standby Eight Duty Amplifiers

EN 54-16 states at least one backup amplifier shall be used to standby each eight duty amplifiers, thus this matrix amplifier failure changeover offers one most economy & safe solution based on EN 54-16 regulations.

### 4 EYAC Messages Simultaneous Broadcast

EVAC, Alert, Clear & Test voice messages could be customized and distributed to 64 different zones at the same time.

### Fault Logging History Record

Human negligence track down and could be downloaded to PC.

### Open Protocol to Inter-work with Third-party Systems

Open protocol system and dry contact output to link with other low voltage system.

### Multi-voice Alarm & Paging Modes

Multiple voice alarm & paging modes to all zones, group zones, neighborhood zones and individual zone.

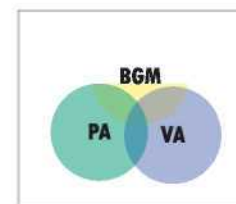
### Expansion up to 312 Zones

Controller cascaded together for expansion up to 312 zones.

## Digital Network Public Address& Voice Alarm System

Our systems for PA and evacuation systems in accordance with EN 54-16 combine unique functionality in perfection with extremely simple programming and operation.

The optimum customer benefit results from state-of-the-art technologies and many years of experience, put into practice Consistently.



All in one solution for BGM, PA & Voice Alarm



User friendly...thanks to easy operation!  
(including interworking with building management systems)



LAN networking...low cost and reliable!



Remote maintenance...with immediate system analysis!



Digital amplifiers 100V of Class-D...  
space saving with reduced cost!



Open system architecture...  
extremely easy interworking with third-party systems!



Extremely easy system planning...  
affords cost advantages for you!



Safety in accordance with EN 54-16...  
quick evacuation in emergencies!



Matrix Amplifier Failure Changeover  
Most economy solution for amplifier  
permanent monitoring system: one backup  
amplifier standby eight duty amplifiers!

EVAC System Software  
VA-6000ST



Descriptions

- \* It is operated in the computer to connect the controller by LAN, supporting operation in Windows2003/Windowsxp/Windows7.
- \* The operations of the system software are including Zone Control, Status Monitor, Offline Program Edit/Upload/Download, Event Recorded, System Configuration, User Management, etc.
- \* System configuration oriented to speed up the system basic configuration.
- \* Automatical playing and timing function to achieve timing programmed playing in the designated zones for unattended operation.
- \* Built-in automatic timing corrector when software launch.
- \* It supports the logins with multiple user passwords and the synchronous operation by multiple software platforms.
- \* It supports both pull and push operations in system configuration to ensure the safety of the configuration datas.



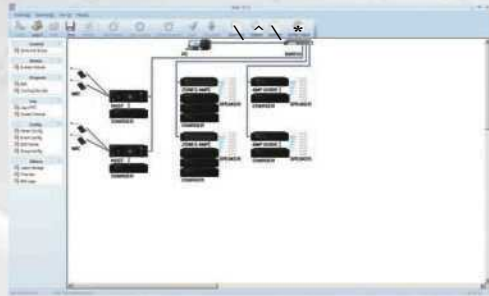
Setup Appearance

Double-click the installation folder, then the user just need to click "Next Step" to finish the software installation, which is the system default installation way and very conveniently.



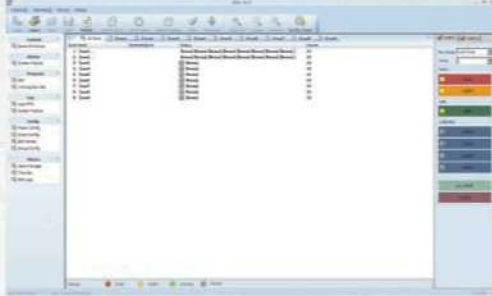
Login interface

After running the software, you have to login with the correct user name and password for the sake of system safety.



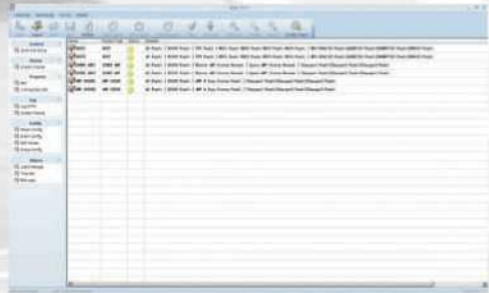
Module configuration interface

The module information of current configuration will be graphics to make sure the intuitive understanding and quick operation.



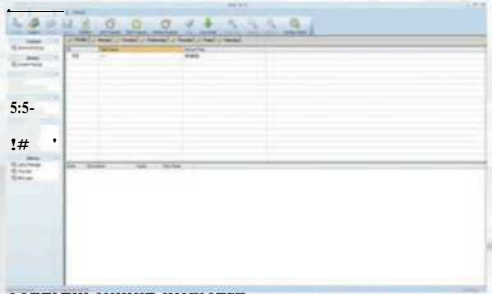
Zone operation interface

Quick playing the evacuation voice, warning voice and BGM. It controls the open and close status of the zones, the volume adjustment, line/mic select and also it will monitor the zone operation status in real time.



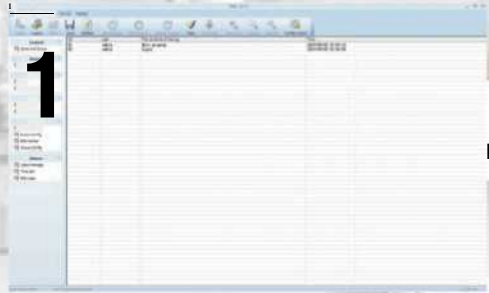
Status inquiry interface

A real-time monitoring to the operation status of the system controller, zone mixer amplifier, amplifier changeover, mic, DC and battery charger.



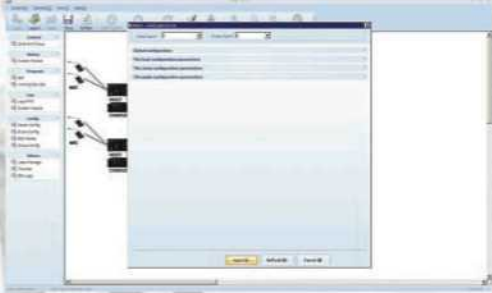
Program timing interface

Edit the system's 24-hour automatic operation procedure in 7 days, including BGM playing, zone timing of on and off status, volume adjustment and zone selecting.



System daily record interface

It records the log of the PC operation, system controller, zone mixer amplifier, amplifier changeover operation and monitoring.



Configuration module interface

The configuration module is including equipment datas, emergency event, name modification and grouping. The configuration datas include the system datas, controller datas, zone amplifier datas, amplifier changeover datas, contact points and grouping, which are applied to the basic datas setting.



Digital Network PA & Voice Alarm Controller  
VA-6000MA



Descriptions

VA-6000MA is a digital controller for public address (PA), voice alarm and background music system. It can stand alone control the complete system and inquiry the status through its 5" colorful touch screen. From the PC with software enable remote control, a remote control can be used to control the equipment's monitor and management. The programmable control input and outputs can be interactive with any alarm module or other third-party low-voltage safety system.

Features

- 1.5 inch HD color touch graphical operation interface.
- One key touch for emergency alarm.
- Support zone selection, zone distribution, group operation, the volume can be adjusted independently.
- Support customized zone name, group name, host name (multi-host network), easy to operate and manage.
- Support event trigger, timing trigger control function.
- Support remote monitor, equipment status real-time check.
- Support event trigger call, can be called when no answer.
- Integrated 4 independent players (support MP3 and WMA format).
- Support fire alarm redundant wiring.
- Emergency online configuration, control interface can work offline.
- Can connect up to 4 remote microphones and 10 external microphone circuit redundancy wire.
- Support fire alarm (Tefu fire alarm controller (finishing Sonjians 9100 and 100 series) fire linkage controller).

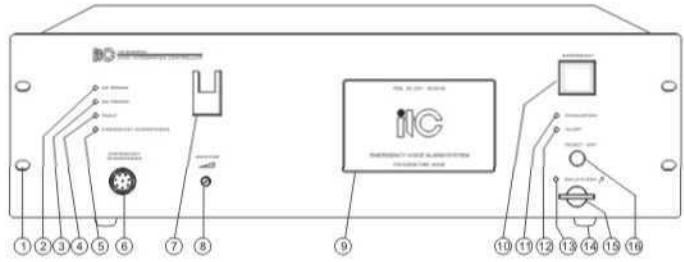
Basic Functions

- Integrated 1 independent background music player, support timing, fixed, (support playback mode), support MP3 and WMA audio formats.
- Support 1 independent voice player, convenient for replacing voice message and language according to ID application.
- Integrated 2 independent voice message players; support programmable stage evacuation alarm mode and specified partition evacuation alarm mode, Evacuation alarm and warning can be played at the same time.
- Integrated 1 channel analog telephone interface, convenient for remote telephone paging broadcast.
- 4 line input (one is for line or ordinary microphone), Fire alarm interface, audio input for external internal recorder, for in an emergency call speech recording.
- A remote MIC interface, connected to A-6 (10M and VA-6000RM remote microphone. Address static address with the standard RJ-45 network and CAT-5 network, using long-distance parallel transmission mode for language communication, the distance is up to 600 meters.
- 3 level signal or no voltage short circuit (or voltage threshold programming decision, default no voltage) input interface, (can be regarded as) quick control key, each short circuit input can be programmed, signals: play language message or specified tone or open external power supply to trigger a third-party equipment to achieve the event triggering warning.
- Real-time diagnosis, treatment, remote control, support sound, light alarm and prompt maintenance, trouble shooting when abnormal.
- Support basic Windows platform visual operation interface, status real-time synchronization, classification rights management to ensure the security system.
- System support third-party online multi-valley relay input and output interface.
- Has a full backup function. By adding multiple hosts, the system can be based on the "cloud" architecture. When the system is more stable and sound, increase the total expansion system control points (Note: configure VA-6000S before increasing, otherwise the increased host cannot operate and work. The host will automatically prompt the user to configure).

Specifications

| HUM                           | VA-6000MA                       |
|-------------------------------|---------------------------------|
| Electrical specification      |                                 |
| The AC power supply           |                                 |
| Voltage                       | ~ 230V, 50/60Hz                 |
| Maximum current               | Less than 0.2A                  |
| Specific input of the use     | 150V/1A, slow type              |
| Power                         | 31W                             |
| DC power supply               |                                 |
| Voltage                       | MVD (±0.1V)                     |
| Maximum current               | 1A                              |
| Performance index             |                                 |
| Emergency microphone          | in                              |
| Impedance                     | 16Ω                             |
| Line input                    |                                 |
| Distortion                    | <1% (rated output power), 1kHz  |
| Frequency                     | 20Hz~20kHz                      |
| Smoothly                      | 30dB                            |
| Impedance                     | 16Ω                             |
| SH                            | >70dB                           |
| Record output                 |                                 |
| Distortion                    | <1% (rated output power), 1kHz  |
| Frequency                     | 20Hz~20kHz                      |
| Sensitivity                   | >100mV                          |
| 4 Mic Output                  |                                 |
| Fault relay output            | Short circuit, no voltage       |
| Fire linkage relay output     | Short circuit, no voltage       |
| 8 relay programmable output   | Short circuit, no voltage       |
| 4-wire output (4V HWE) output | +5V, 1A                         |
| programmable trigger input    |                                 |
| Level mode                    | Lowest 3.3V                     |
| Short circuit mode            | Short circuit, no voltage       |
| Short input input             |                                 |
| Fire alarm input control      | Pulses 0.5s minimum             |
| Voice message                 |                                 |
| Host format                   | MP3 or WMA format               |
| Slot type                     | SD                              |
| Information capacity          | 128MB (programmable memory 255) |
| Storage time                  | mid-year                        |
| Life expectancy               |                                 |
| Operating time                | 1100h                           |
| Slot time                     | >10 years                       |
| Mechanical index              |                                 |
| Size (length × width × depth) | 411 × 134 × 44mm (H × W × D)    |
| Net weight                    | About 1.5kg                     |
| Installation                  | Desktop or 19-inch cabinet      |
| Color                         | Black                           |
| Environment requirements      |                                 |
| Operating temperature         | +5°C ~ +40°C                    |
| Storage temperature           | -20°C ~ +70°C                   |
| Moisture temperature          | <95%                            |

VA-6000MA Front Panel <<

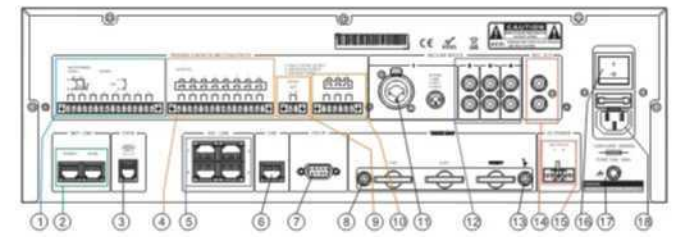


Connectors

- 1) Mounting positioning holes (19 inch cabinet).
  - 2) Main power indicator:
    - (1) Green - the current host AC power supply is normal.
    - (2) Yellow - the current host AC power is in failure.
    - (3) The host DC24V standby power indicator:
      - (1) Green - current host AC power supply is normal.
      - (2) Out. current host standby power supply is not configured.
      - (3) Yellow-current host standby power supply fault.
    - (4) System status indicator:
      - (1) Yellow - indicates the current system is fault, long shine means the user performs a manual reset, lasted about 1 minute, if the light does not be eliminated, will continue shining; when the system fault be removed, the light automatically extinguished.
      - (2) Out - earth module is running normally or the system doesn't open module detection;
  - 3) Emergency PTT (push to talk) microphone.
  - 4) Color status description:
    - (1) Out - H1 in normal.
    - (2) Green - PTT is broadcasting.
    - (3) Yellow-fault.
  - 5) Aviation socket, used to connect the PTT microphone.
  - 6) PTT microphone input.
- If the user presses PTT switches, the host will do the following judgment, function reference implementation are as follows:
- (1) Selects partition for selective broadcast.
  - (2) Without selecting partition, it is for all zone broadcast.
  - (3) If the system is working in emergency mode, no partition is selected then it broadcasts to the current trigger output partition.
- Note: in the process of broadcasting the PTT microphone unclip switch for more than 5 seconds, the system

- will automatically cut off the radio.
- (4) The non-machine interface (5 inch TFT with touch LCD, please refer to the user manual operation --).
- (5) Partition monitor speaker volume control knob: used to adjust the volume to monitor the current partition audio output after open the monitor,
- (6) System work mode switch:
  - (1) Red quick flash - the system is currently in reset mode, prohibition all manual operation.
  - (2) The red flash slowly - the system is currently in emergency mode (press about 3 seconds to manually entered or automatically triggered automatically enter, this mode allows to play IMC audio, normal mode is not allowed).
  - (3) Out - working in normal mode.
  - (4) Noli; 1, when the indicator light is flashing by about 3 - 4 second: the system is in emergency mode.
  - (5) 2, when the indicator light is off press about 3 - 4 seconds to enable emergency mode.
- 7) Evacuation warning voice message & work status indicator:
  - (1) Extinguished - evacuation/warning voice message : BGM normal.
  - (2) Yellow- evacuation/warning voice message/ BGM fault.
  - (3) The best feel.
- 8) Background music storage (SD) card, used to store the background music, can be MP3 and WMA format (note the maximum song quantity cannot exceed 215).
- (9) Multifunctional multiplexing keys (RESET/OFF).
- (10) The user selects the partition to close the currently selected by a user partition output.
- (11) The panel red microphone was broadcast, press this button to quickly end the broadcast.
- (12) The system failure by pressing this button can be temporarily closed the audio output (about 1 minutes, to close the audio output, all faults at corresponding fault module prohibition detection function should be cleared).
- (13) Press this button to enter the non-main interface into the system log interface when the system is no in the log interface.
- Note: order of execution - PTT broadcast - select the zones - system faults - back to the main interface.

VA-6000MA Back Panel <<



Connectors

- 1) level signal or short no voltage input signal.
- (2) System network interface into the host.
- 3) Telephone interface.
- (4) Relay output interfaces.
- 5) remote MIC interface (note MIC address should be corresponding with the number).
- 6) CAN bus interface, connecting to external CAN bus.
- 7) System firmware upgrade interface.
- 8) Speech SO card plate and fastening screws,
- 9) 10W power output (programmable, manually or automatic control output).
- 10) From left to right: system fault status output interface - any module fails, this interface is shorted output, otherwise disconnected: working state output, pull-in when the system is in emergency mode is, off when in

- normal mode; emergency reset input interface - when the system is working in emergency mode, input a low level signal bigger than OSS from this interface to reset the system into normal working mode.
- 11) line input - connects to 10 external MIC/CD/TONE audio signal.
- 12) MIK2/J3 A/M line input - connects to external standard audio signal like CD player, radio and so on.
- 13) 4 parallel microphone audio output signal, that is record in a audio signal output.
- 14) the host DC24V DC power input socket, connects to external VS-6000B power supply interface.
- 15) the main power switch.
- 16) the host shell grounding (NDIE: please ensure the reliable grounding).
- 17) AC main power input socket (with fuse and the power switch, confirm the voltage range before power on).



## Descriptions

VA-6000MS changeover is an integrated controller supporting main and backup amp swithing, speaker circuit grounding detection, open circuit and short circuit detection,- compatible with three or four wire volume controller wiring, without extra wiring or power supply; combining 8 programmable stem node or wet node trigger inputs and 8 programmable on-line output signal. It works with class D amplifiers, traditional amplifiers to provid a safe, affordable solution to the PA & Voice Alarm system.

## Features

- 2U chassis design, high integrated, modularization.
- Support speaker circuit grounding, open circuit and short circuit detection.
- Support 3/4 wire horn circuit wiring.
- 8 programmable trigger input interfaces,
- 8 programmable trigger output interfaces.
- Support power-saving mode when the amplifier has not input signal enters.
- Support linos redundance wiring.
- Support linkage to fire alarm controller.

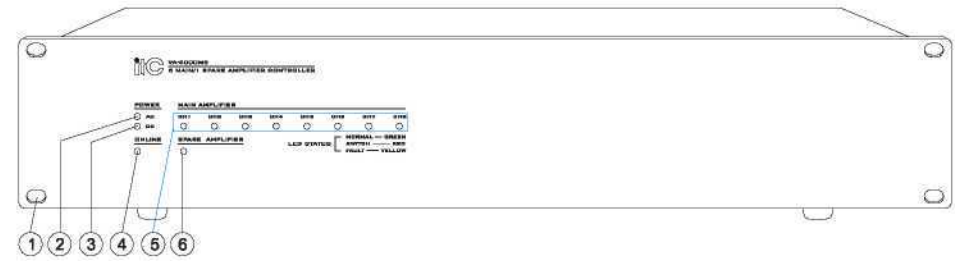
## Basic Functions

- \* Main amplifier automatic backup switching power amplifier, real-time detection, indicate by different color LEDs.
- \* Real time monitoring speaker bus loop, power amplifier status, automatic control switch.
- \* Allows amplifier enter into power saving mode when no signal input to save energy (start through VA-6000ST, default disabled).
- \* Allows to configure the priority of network and local audio.
- \* Support power through, even if the main and standby power supply is cut off at the same time (amplifier power supply normal), the local 8 audio signals are not affected.
- \* 8 stem node or wet node input port, to trigger the pre-programmed language information to the specified zones or open the coresposing external power to the corresponding event warning.
- \* 8 programmable relay signal output port, ouput no voltage output short circuit relay control signal to the third party equipment to realize on-line automatic control.
- \* Provide DC 24V standby power input interface (connect to 24V DC supplied by VA-6000BC).

## Specifications

|                                   |   |
|-----------------------------------|---|
| <b>Model</b>                      | <b>VA-6000MS</b>                                  |
| AC power supply                   |   |
| Voltage                           | ~ 230V, 50/60HZ                                   |
| Maximum current                   | 0.3A (not including the 4 wire strong cut output) |
| Specification of the fuse         | 250V/1A, slow speed type                          |
| DC power supply                   | DC power supply                                   |
| Voltage                           | 24V DC, ±20 %                                     |
| Maximum current                   | 2A (not including the 4 wire strong cut output)   |
| Power                             | 48W   |
| performance index                 |   |
| Parallel signal input / output    |   |
| Distortion                        | <1 % (rated output power),l kHz                   |
| Frequency                         | 80Hz~20KHz  |
| Sensitivity                       | 385mV   |
| Impedance                         | 10KO  |
| SR                                | >70dB   |
| Contact output                    |   |
| 8 relay programmable output       | Short circuit, no voltage                         |
| 8 programmable trigger input      | 8 programmable trigger input                      |
| Level model                       | The highest 3.3V                                  |
| Short circuit mode                | No voltage, short circuit                         |
| Cooling way                       | Air cooled  |
| Protection                        | Delay / temperature / short / overload            |
| Mechanical index                  |   |
| The size (length x width x depth) | 484 x 88 x 447 mm (19 inches wide, 2U)            |
| The net weight                    | About 7.8 kg                                      |
| Installation                      | Desktop or 19 inch cabinet                        |
| Color                             | Black   |
| Environmental requirements        |   |
| Environmental requirements        | +5V ~ +40Π  |
| Storage temperature               | •20T: ~ +70°C                                     |
| Relative temperature              | <95% (no treatment)                               |

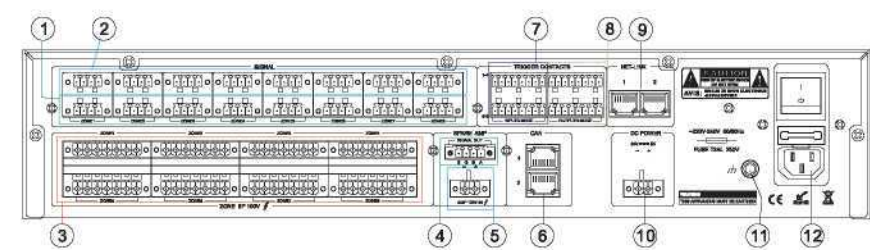
## VA-6000MS Front Panel «



### Connectors

- ⊗ 19 inch rack location hole and machine foot.
- ⊗ Main power indicators:
  - (1) Off - stop working.
  - (2) Green - in normal power supply.
  - (3) Yellow-main power fault.
- ⊗ DC24V power indicator:
  - (1) Off - main power is not configured.
  - (2) Yellow - standby power supply fault.
  - (3) Green - standby power supply in normal.
- (4) Network status indicator:
  - (1) Yellow - disconnected from the network.
  - (2) Tgreen - network in normal.
- ⊗ The main amplifier 1~8 channel state indicator:
  - (1) Green - power amplifier work.
  - (2) Yellow-power amplifier fault.
  - (3) Red - the main amplifier fault, the duty of the current falut main power amplifier has shifted to the standby power amplifier.
- ⊗ 6 standby power amplifier work state description:
  - (1) Green - power amplifier work.
  - (2) Yellow - power amplifier fault.
  - (3) Red • the main amplifier fault, the duty of the current falut main power amplifier has shifted to the standby power amplifier.

## VA-6000MS Back Panel <<



### Connectors

- ⊗ 8 parallel signal and audio power amplifier sleep signal output interfaces .connecting to external amplifier signal input.
- ⊗ 8 local parallel audio signal input interfaces, connecting to external parallel audio signal output device.
- ⊗ 1 ~8 partition audio power signal output, connecting to external speaker or a three / four wire voice control box.
- ⊗ Standby power amplifier audio signal output.
- ⊗ Backup audio power signal input.
- ⊗ CAN bus interface, connecting to external VA-6000BC.
- ⊗ 8 programmable trigger signal input (level signal or short-circuit no voltage signal input).
- ⊗ 8 programmable relay output signal.
- ⊗ Network interface.
- (Q) Backup power supply input interface connecting to external VA-6000BC DC power supply output.
- (Q) Chassis ground (Note: please ensure the reliable grounding).
- ⊗ Power supply switch.





## Descriptions

VA-6000FM is used for paging control in the VA-6000 system, to allow users remote control the system's voice message and make paging call. It supports eight zones/groups selection. It can add zone/group by adding extension unit VA-6000EM which also can support eight zones. Seven extension units can be added at most in a system to expand to 64 zones.

## Features

- Onekey zone selection, easy to understand and operate.
- Parallel transmission can realize long distance transmission through CATS cable.
- Easy to see the system fault and system module status display.
- Support zone/ group selection extension.
- Support lino audio input and the volume is adjustable.
- Support redundancy wiring.
- Support DC 24V.

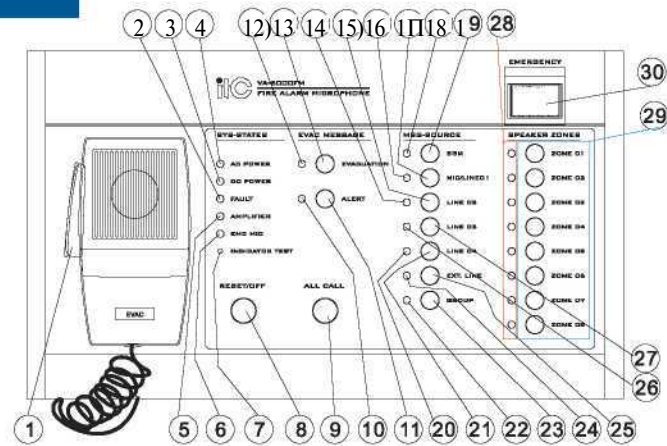
## Basic Functions

- \* MIC output level is adjustable.
- \* Priority of paging can be set through VA-6000ST software.
- \* Build-in HI-FI monitor speaker, support monitor output.
- \* Onekey to fast enter into emergency broadcast status.
- \* With external headset jock, to monitor or recording the paging voice.

## Specifications

|                        |                                  |
|------------------------|----------------------------------|
| Model                  | VA-6000FM                        |
| DC Supply              |                                  |
| Power Supply           | 24V DC, $\pm 20\%$               |
| Maximum Current        | 0.1 A (including extension unit) |
| Power Consumption      | 2.4W (including extension unit)  |
| Performance            |                                  |
| Parallel Signal Output |                                  |
| THD                    | <1 % (rated output power), 1 kHz |
| Frequency              | 80Hz~16kHz                       |
| Sensitivity            | 500mV                            |
| Impedance              | 10k $\Omega$                     |
| S/N Ratio              | >70dB                            |
| Line In                |                                  |
| THD                    | <1 % (rated output power), 1 kHz |
| Frequency              | 80Hz~16kHz                       |
| Sensitivity            | 350mV                            |
| Impedance              | 10k $\Omega$                     |
| S/N Ratio              | >70dB                            |
| Microphone             |                                  |
| Sensitivity            | SnV                              |
| Impedance              | 600 $\Omega$                     |
| Machine                |                                  |
| Demension(LxWxD)       | 256 x 52 x 149mm                 |
| Net Weight             | 1.5kg                            |
| Mounting               | Desktop or 18 inch cabinet       |
| Color                  | Black                            |
| Environment            |                                  |
| Operation Temperature  | +5°C ~ +40°C                     |
| Storage Temperature    | +20°C ~ +70°C                    |
| Relative temperature   | <95 % (no condensation)          |

## VA-6000FM Front Panel «

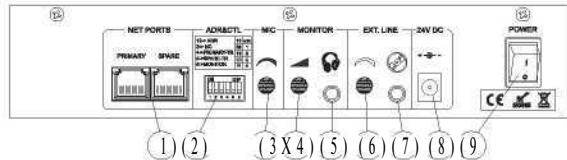


### Connectors

- ① Handset PTT (push to talk) microphone coil switch and work status indicator light:
  - (1) Off - PTT microphone normal.
  - (2) Yellow-PTT microphone fault.
  - (3) Flash Green - Microphone priority is replaced by the audio which has higher priority than it.
- ② System status indicator light (Note: not the microphone status display):
  - (1) Off - All devices and module spare power normal.
  - (2) Yellow - one or more devices and spare power fault.
  - (3) DC power status indicator light of the devices (System will ignore the working status if no configuration and display normal by default):
    - (1) Off - Some or all of the devices DC power supply fault.
    - (2) Yellow - All devices DC power supply normal (display normal even there is fault if no configuration).
- ③ Main power status indicator light of the devices:
  - (1) Off - All the devices or modules power supply normal.
  - (2) Yellow - Some or all devices or module power supply fault.
- ④ Working status indicator light of the amplifier:
  - (1) Off - All amplifier working normally including spare amplifier.
  - (2) Yellow-Some or all amplifier fault.
- ⑤ Indicator light of test button: After press the test button, all indicator light color will change from green to red to yellow and last to normal. System main power state indicator light:
  - (1) Green - All devices and modules power supply normal.

- (2) Yellow - Some or all devices and modules main power supply fault.
- ⑥ Fault resetting/ close zones.
- ⑦ All zones selection button.
- ⑧ Alarm voice status indicator light and control button:
  - (1) Off - Alarm voice player and memory card audio file normal.
  - (2) Green - Alarm voice is playing.
  - (3) Yellow - Alarm voice lost or player fault.
- ⑨ Evacuation voice status indicator light and control button:
  - (1) Off - Evacuation voice player and memory card audio file normal.
  - (2) Green - Evacuation voice is playing.
  - (3) Yellow - Evacuation voice or player fault.
- ⑩ ( 5 ) ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ Main controller line input control and status indicator light:
  - (1) Off - Current line input is not working.
  - (2) Green - Current line input is working.
- ⑰ BGM status indicator light and control button:
  - (1) Off - BGM player and memory card audio file normal.
  - (2) Green - BGM is playing.
  - (3) Yellow-BGM or player fault.
- ⑱ zone and group control mode selection button.
- ⑲ Microphone and line input selection button, green means current input.

## VA-6000FM Back Panel <<



### Connectors

- ① Main and spare network interface.
- (2) Device address and function configuration! " 1, 2 " are control bits for device address, "4,5" are the control bits for main device to terminal resistance and spare device to terminal resistance, " 6 " is control bit for local voice monitor).
- ③ PTT microphone output volume adjustment.
- ④ Volume monitor.
- ⑤ Audio output monitor.
- ⑥ Line in volume adjustment.
- ⑦ Line in.
- ⑧ DC24V input.
- ⑨ Power switch.



Descriptions

VA-6000RM Is used for remote control VA-6000 system, allowing remotely control for system voice message information and zones paging by users; it can drive 8 zones and extended zones or groups by Microphone Extension unit( VA-6000EM) to 64 zones, each can connect max 7 extension unit and every extension keyboard have 8 zones.

Features

- One press to select zones, which is simple and intuitive.
- Parallel transmission; extend the transmission distance by CAT5.
- Obvious system fault and module status indicator.
- Supporting zones or groups extension.
- With line audio input and adjustable input volume.
- Paging button mode and PTT mode are all available.
- Supporting redundant wiring.
- DC 24V Phantom Power supply.

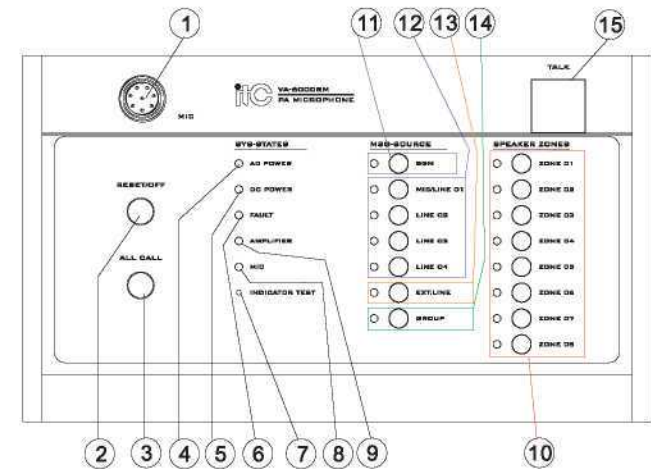
Basic Functions

- \* Microphone output level is adjusted.
- \* Ontrol priority right is available by VA-6000ST.
- \* Build-in Hi-Fi monitor speaker, with monitor output.
- \* One press into the paging status.
- \* External Headphone jack; can monitor or record paging voice.

Specifications

| Model                     | VA-6000RM                           |
|---------------------------|-------------------------------------|
| DC Supply                 |                                     |
| Voltage                   | 24V DC, ±20%                        |
| Max current               | 0.1A (not including extended panel) |
| Power dissipation         | 2.4W (not including extended panel) |
| Performance index         |                                     |
| Balance input             |                                     |
| Distortion                | <1%, 1kHz                           |
| Frequency                 | 80Hz~16kHz                          |
| Sensitivity               | 500mV                               |
| Impedance                 | 10kΩ                                |
| Noise Ratio               | >70dB                               |
| Line input                |                                     |
| Distortion                | <1%(RMS), 1kHz                      |
| Frequency                 | 80Hz~16kHz                          |
| Sensitivity               | 350mV                               |
| Output Impedance          | 10kΩ                                |
| SNR                       | >70dB                               |
| Mic                       |                                     |
| Sensitivity               | 5mV                                 |
| Output Impedance          | 600Ω                                |
| Mechanical Specifications |                                     |
| Dimension( L x W x D)     | 256 x 52 x 149mm                    |
| Weight                    | About 1.5kg                         |
| Installation              | Desktop or 19 inch rack             |
| Color                     | Black                               |
| Environmental requirement |                                     |
| Operation temp            | +5°C ~ +40°C                        |
| Storage temp              | +20°C ~ +70°C                       |
| Relative temp             | <95% no condensation                |

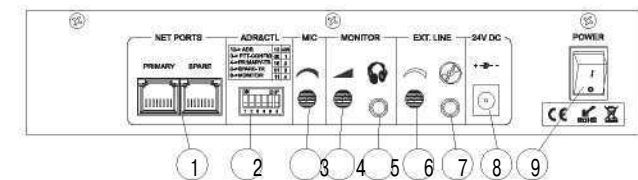
VA-6000RM Front Panel «



Connectors

- (D) Goose Mic Socket.
- ⊗ Fault reset/Zone closed.
- ⊗ Full zone selection.
- ⊗ The status indication of main power supply in the system:
  - (1) Green - Normal status of all the equipments and main power supply module in the system
  - (2) Yellow - Unusual status of any equipment or main power supply module in the system
- (5) The status indication of backup DC power supply in the system:
  - (1) Off - Normal status of all the equipments and backup power supply module in the system.
  - (2) Yellow - Unusual status of any equipment or main power supply module in the system.
- ⊗ Unusual status of any equipment or module in the system:
  - (1) Off - Normal status of all the equipments and modules.
  - (2) Yellow on or flashing - All the equipments or module of the system are in fault status.
- ⊗ Testing button of the indicators on the panel: if this button is pressed, the indicators on the panel are on from green, red, to yellow, which means it is in normal status.
- ⊗ The status of the goose mic
  - (1) Off - Goose mic is normal.
  - (2) Yellow - There is fault in the goose mic.
- (2) Working status of the amplifiers in the system:
  - (1) Off - All the amplifiers including backup amplifiers are working normally.
  - (2) Yellow - All/Any of the amplifiers including backup amplifiers have fault problem.
- (10) Zone working status indicator and selection button.
- ⊗ BGM control of the master unit:
  - (1) Off - Normal status.
  - (2) Green-Working status.
  - (3) Yellow-Fault.
- ⊗ Line input audio selection control button.
- (13) Goose mic and mic line input selection button.
- ⊗ Zone and zone function selection button.
- ⊗ Paging switch.

VA-6000RM Back Panel <<

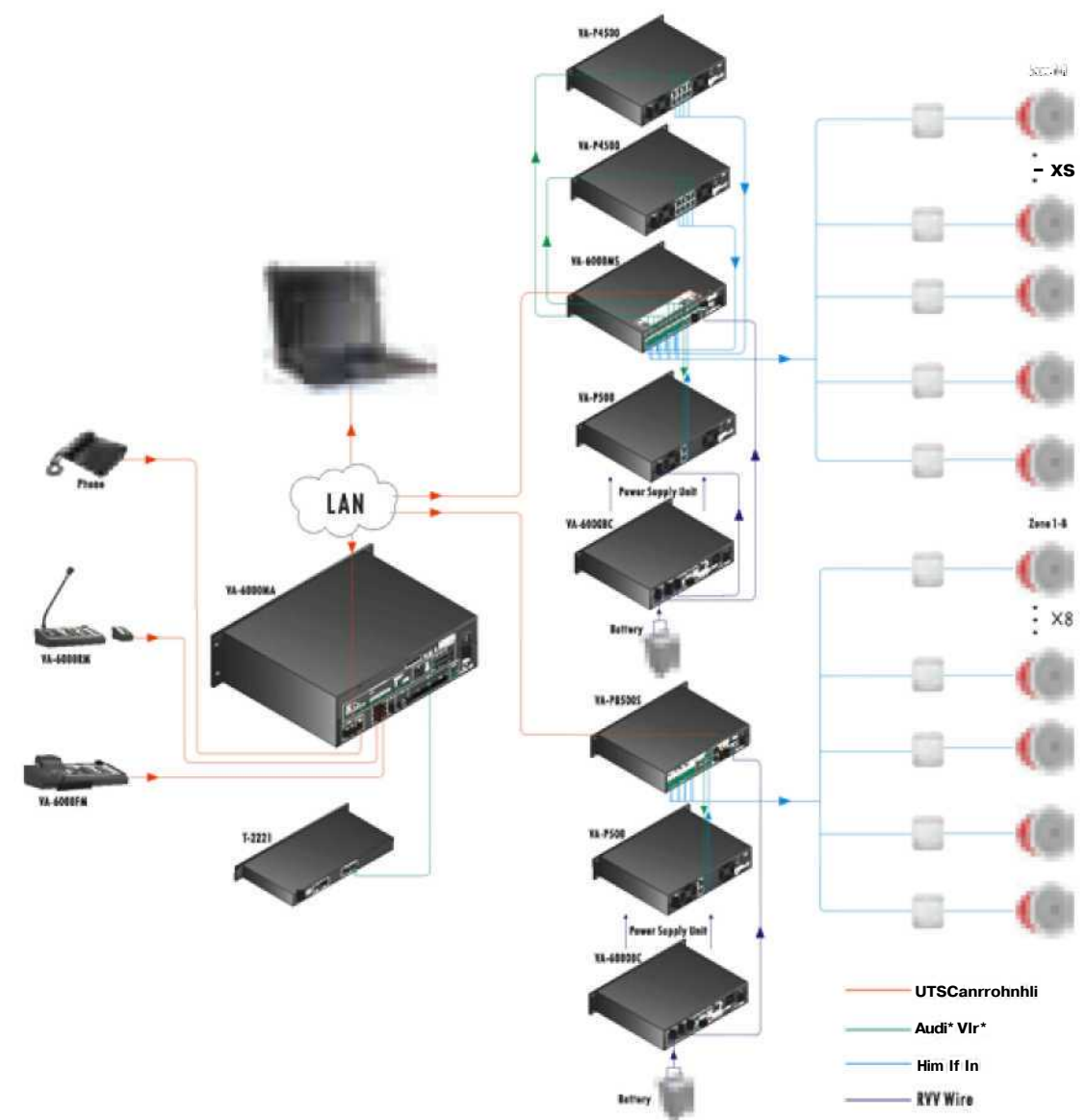


Connectors

- (D) Networking interface.
- (2) Networking address and function configuration ("1,2" bits: Equipment address control; "3" bits: Configuration panel; "1,5": Paging button control mode-light touch or PPT mode; "4,5" bits: Main and backup units to connect the terminal resistance control; "6" bits: Local paging monitoring control).
- (3) PPT mic output volume adjusting.
- (4) Monitoring volume.
- ⊗ Monitoring audio output.
- ⊗ Line input volume adjusting.
- ⊗ Line audio input.
- ⊗ DC 24V input.
- ⊗ Power Switching.



16 Zone EVAC System Connection Template-3



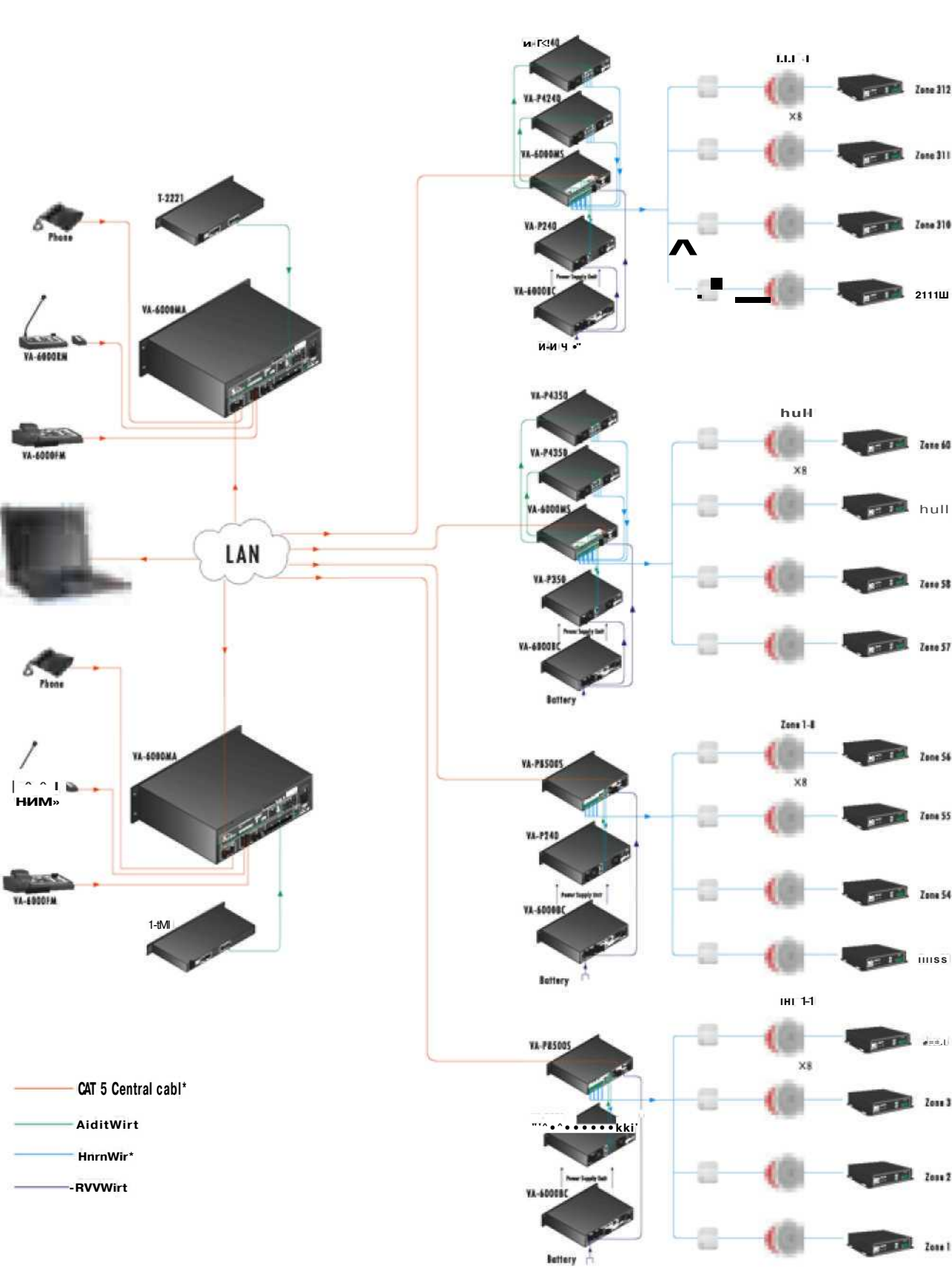
Application solutions

Una lysiavilUrt 4tf n\*1 frtrtrtrt, mn uufy4lftini raqlramanij ol lht ners. Ftr drily hack ground aisle, huidest prng nnnunuaeni andialaphana tqiatjennuncaman, nhn amargency lna4nr1i-n nil\* l\* fr asndancy Hfarmnlwn nnd emrgency prng oraadtatf, nry suitable r\*f effka buldups, intil isHrt bulling, hnrti, ufabrnt\* «Mar; lha s1ar\*n nnd nrhr pinret nF Btdium nnd imnll.

System equipment list

- \* 1 unitT system nnn nnnrtler M - W 1 W, wirh built-in BAC ALETT. CLUI, TEST и к\* BtsinDt, upptrt Jliit inputs. 1 mk input, 1 racDrded mnisga input grnd 1 channel Fin nlnm cnllaclinn InHrfoit-
- \* 1 unihtl 1 n« digital gmplifiir VAPSDDS built-in JWW digirel nmplifiir grnd 8CH p«wvr pgrillgn, dhibula ihi nilmjrk ligngl grnd lh« buck ground music rpopiwnd hgm lhi hail fi((LAN mbli |g different innai. In ha cannttad wift \*\* mm W- P5DD digirel nmpl Jier ni shndhy nmp, «tian 'ha man taplifitf » mi nut faulty, rht shndhy nmpliliar r<|> \* wr auianntionly, It truaia lnn if srem 4\*8 (gftth/.
- \* 1 unit «l ihgngigfir mmhini. |g »mh bilmn ihi MF1500 grnd VA-P50Q ID insaa lhi i|srtn nnnriin| sgftlf.
- \* 1 unir \*frint\* one audio wma, wilkullin CD playr, UI/FM lunar, MF3 playr, on iimutm\*\*usly «wipul 1 nucia »urcs.
- \* 1 unimf (amertflft alarm paging twVAWWFH grnd l unli nt buiintt: paging t\*(VA(W(W, lor rht erjiritntit paging \*4 snitm iKno\*nenHtJ\*nirol.
- \* 7 units gf fit si D gif lilin /7777 ad 1 unit «l ilgis D gmplitiir U- FI ZD, dii rriMI ttii nihtgrt sjagl grnd burk ground misit riciind ham H- i(KKW\* u Itii diflanni ignat, 7 Piili DF VA-P42D inha nnn nmpllinr, nnd lha l unil nf WP11D is lht shndhy t mprlu t wthn ttii main aefirlier hacama Faulty, lha slond hy «mpliWf will \*M ailnmatmly/, «ill filer ponr saying mada aulnmnimly wtim ih«4\* if naujnal,
- \* 1 unit «l l- P5DD digirel nmpliliir gi slondhy nmp, »tiin ltiit buih n «mpliFir gf VAP5DD5 (oni gul lelty, il t\* t gum euUBniirallj. 1o aniu\* iba i yilim wtrk sdtly. inrtr pswr u\* ing mtit nulinmnlmly wbn nn sijHI input.
- \* 1 unir tf DC po«r and rachoger MFOOBC, »htn Hit iftitm po«r omt aui Full, K apply \* » и т la flit tysKm fmsurt ir agkring (g\*lnuaufly.
- \* 5 units gf n l w [tnlnl rjrA-HK\*ICI:žSCmCHJOIur u«n l\* «Jjusl lk\* mttmi

312 Zone EVAC System Connection Template-4



# Reliability in any emergency situation!

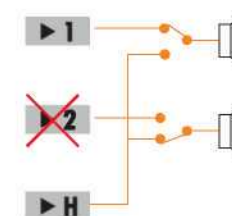
**Built-in MP3 module for audio signals-close to CD quality**

Please leave the building immediately!!!

monitored to comply with EN 54-16

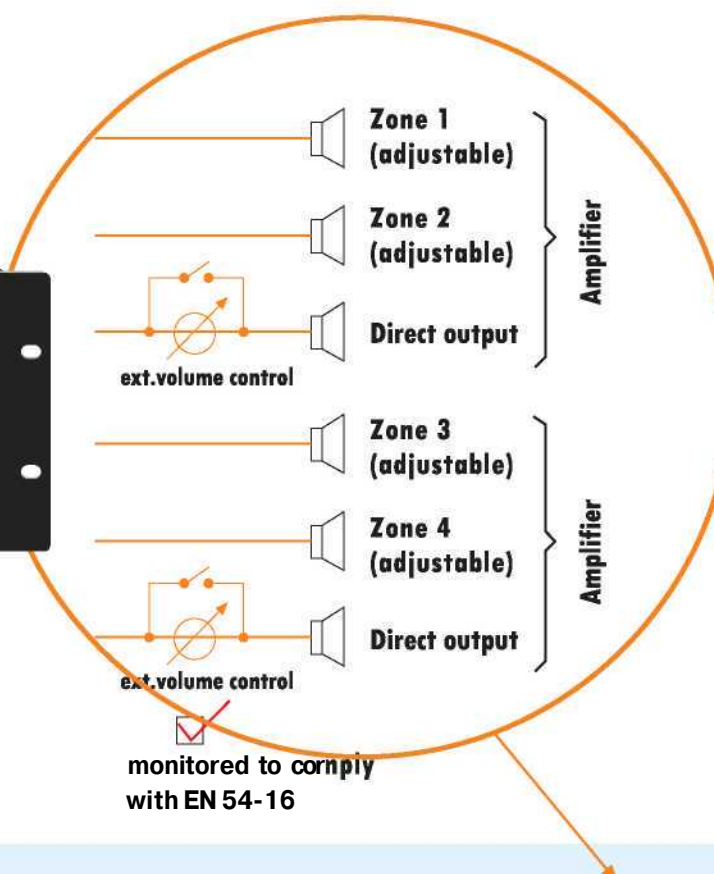
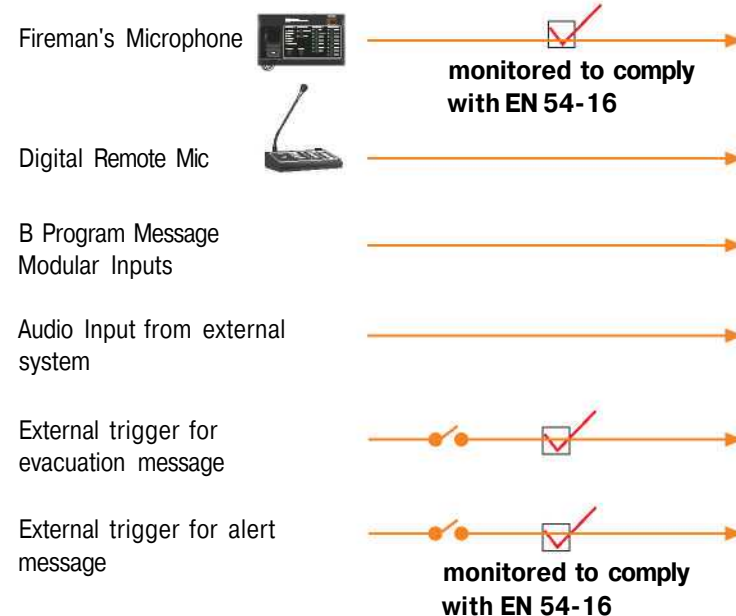
**Built-in stand-by amplifier**

monitored to comply with EN 54-16



## Monitored Fireman's Microphone

The fireman's microphone, which is used to broadcast life-saving instructions in an emergency, is permanently monitored. A fault on the microphone capsule or on the microphone line will immediately signal a fault indication.

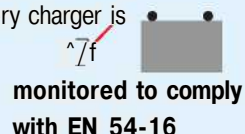


## 2 monitored inputs for trigger of evacuation and alert message

These 2 volt-free inputs, e.g. coming from a fire detection system or from external push-buttons, are used to trigger the evacuation and alert message into all zones. These lines are also monitored and a break or a short circuit of the lines will immediately signal a fault indication.

## Integrated and monitored battery backup

The integrated maintenance-free 24V high-power battery supports uninterrupted operation of the voice alarm system for 30 minutes and standby for 72 hours. The integrated and intelligent battery charger is also monitored and can detect a faulty battery by means of the charging current.



## Fault logging

The system can store up to 500 fault messages indicating date and time of occurrence in a non-volatile Error. The data is therefore secure and retained during a total power breakdown.

## Loudspeaker line monitoring

All loudspeaker lines are continuously monitored. The monitoring is based upon speaker loop line supervision. This method ensures that a faulty loudspeaker line maintenance costs are significantly reduced.



# Digital Voice Evacuation & Public Address System

[illegible]